



STEAM TURBINE  
FULL POWER AND  
QUICK REVERSAL  
GRADE SHEET  
(rev.3)

<b>FULL POWER POINT DEDUCTIONS STEAM TURBINE</b>	
<b>ABILITY TO DEMONSTRATE FULL POWER</b>	<b>MAX DEDUCTION</b>
Equipment Pre-reqs not met IAW OPNAVINST 9094/PMS/EOSS.	1.0
Full power terminated due to equipment casualties/safety concerns.	.41
Instruments/gauges not calibrated or out of commission.	.05
Deduction of .01 will be made for every percentage point below the required 100% Full Power (srpm/shp) achieved.	.01 per percentage point below min. SHP/RPM
Any system not operated IAW EOP or design specification.	.25
NON-COMPLIANCE WITH ENGINEERING PROCEDURES AND APPLICABLE SAFETY PRECAUTIONS	.41
<b>BOILERS/MAIN ENGINE</b>	<b>MAX DEDUCTION .30</b>
Indication of improper combustion.	.05
Fuel oil pressure out of parameter.	.02
Steam Drum pressure/water level out of parameters.	.02
ABC/FWC requiring adjustments by operator during trial.	.04
DFT above/below design parameters.	.02
Air casing leaks (depending on severity).	.05
Excessive feedwater leaks (depending on severity).	.05
Vacuum not within design operating pressure.	.05
Air Ejectors not within design operating pressures.	.03
Excessive steam system leaks (depending on severity).	.05
<b>PRIMARY PLANT (CVN ONLY)</b>	<b>MAX DEDUCTION .25</b>
NI inoperative.	.10
SGWLC Malfunction.	.10
RCP or RCP Breaker inoperative.	.10
Total Power inoperative.	.10

<b>REDUCTION GEARS – SHAFTING (Non CRP)</b>	<b>MAX DEDUCTION .15</b>
Excessive casing lube oil leakage per NSTM 241.	.02
Vent Fog Precipitator emitting oil vapor.	.02
No indication of oil flow in sight flow indicator.	.05
Unusual Noise/Vibration in Red Gear	.05
Sump levels not within operating range.	.02
Cooling Water Low Flow/Pressure Alarm.	.01
Excessive bearing lube oil leakage per NSTM 244.	.02
Unusual Noise/Vibration in Shafting	.02
Excessive stern tube seal leakage per NSTM 244.	.05
Cooling Water Strainer/Filter high delta P.	.01
<b>MAIN LUBE OIL SYSTEMS</b>	<b>MAX DEDUCTION .20</b>
MRG Lube Oil Sequencing did not operate per design.	.05
Excessive system lube oil leakage per NSTM 262.	.05
Lube Oil Strainer/filter high delta P.	.02
Lube oil Temp Regulating Valve operated manually.	.02
Unloading Valve not operating per design.	.02
Any Lube Oil System Alarm	.02
Lube oil temp not maintained with parameter.	.02

<b>FUEL OIL SYSTEMS</b>	<b>MAX DEDUCTION .20</b>
Fuel oil leaks on service pumps in excess of NSTM 503.	.05
High delta P across Filters/Strainers/Coalescers.	.03
Fuel Oil Header Temperature operated out of parameter.	.02
Fuel Oil Header Pressure out of parameter.	.03
Any Fuel Oil System Alarm.	.02
Fuel system leaks	.05
<b>AUXILIARY EQUIPMENT FOR STEAM PLANTS</b>	<b>MAX DEDUCTION .15</b>
Hot bearing.	.02
Excessive lube oil leaks per NSTM 262.	.05
Lube oil temperatures not maintained within parameters.	.02
Excessive gland leak-off.	.02
Excessive governor hunting.	.02
Erratic operation of steam reducers.	.02

<b>QUICK REVERSAL POINT DEDUCTIONS STEAM TURBINE</b>	
<b>ABILITY TO DEMONSTRATE QUICK REVERSAL</b>	<b>MAX DEDUCTION</b>
Quick reversal terminated due to equipment casualties/safety concerns.	.41
Instruments/gauges not calibrated or out of commission.	.05
Failure to achieve $\geq 80\%$ Full Power IAW INSURVINST 4730.1E	1.0
Any system not operated IAW EOP or design specification.	.25
<b>NON-COMPLIANCE WITH ENGINEERING PROCEDURES AND APPLICABLE SAFETY PRECAUTIONS</b>	.41
<b>BOILERS/MAIN ENGINE</b>	<b>MAX DEDUCTION .30</b>
Indication of improper combustion.	.05
Fuel oil pressure out of parameter.	.02
Steam Drum pressure/water level out of parameters.	.02
ABC/FWC requiring adjustments by operator during trial.	.04
DFT above/below design parameters.	.02
Air casing leaks (depending on severity).	.05
Excessive feedwater leaks (depending on severity).	.05
Vacuum not within design operating pressure.	.05
Air Ejectors not within design pressures.	.03
Excessive steam system leaks (depending on severity).	.05
<b>PRIMARY PLANT (CVN ONLY)</b>	<b>MAX DEDUCTION .25</b>
NI inoperative.	.10
SGWLC Malfunction.	.10
RCP or RCP Breaker inoperative.	.10
Total Power inoperative.	.10

<b>REDUCTION GEARS – SHAFTING (Non CRP)</b>	<b>MAX DEDUCTION .15</b>
Excessive casing lube oil leakage per NSTM 241.	.02
Vent Fog Precipitator emitting oil vapor.	.02
No indication of oil flow in sight flow indicator.	.05
Unusual Noise/Vibration in Red Gear	.05
Sump levels not within operating range.	.02
Cooling Water Low Flow/Pressure Alarm.	.01
Excessive bearing lube oil leakage per NSTM 244.	.02
Unusual Noise/Vibration in Shafting	.02
Excessive stern tube seal leakage per NSTM 244.	.05
Cooling Water Strainer/Filter high delta P.	.01
<b>MAIN LUBE OIL SYSTEMS</b>	<b>MAX DEDUCTION .20</b>
MRG Lube Oil Sequencing did not operate per design.	.05
Excessive system lube oil leakage per NSTM 262.	.05
Lube Oil Strainer/filter high delta P.	.02
Lube oil Temp Regulating Valve operated manually.	.02
Unloading Valve not operating per design.	.02
Any Lube Oil System Alarm	.02
Lube oil temp not maintained with parameter.	.02

<b>FUEL OIL SYSTEMS</b>	<b>MAX DEDUCTION .20</b>
Fuel oil leaks on service pumps in excess of NSTM 503.	.05
High delta P across Filters/Strainers/Coalescers.	.03
Fuel Oil Header Temperature operated out of parameter.	.02
Fuel Oil Header Pressure out of parameter.	.03
Any Fuel Oil System Alarm.	.02
Fuel system leaks	.05
<b>AUXILIARY EQUIPMENT FOR STEAM PLANTS</b>	<b>MAX DEDUCTION .15</b>
Hot bearing.	.02
Excessive lube oil leaks per NSTM 262.	.05
Lube oil temperatures not maintained within parameters.	.02
Excessive gland leak-off.	.02
Excessive governor hunting.	.02
Erratic operation of steam reducers.	.02

